ASMC Use Only:	
Fee:_	
Bond Required:	
Date Approved:	

#### APPLICATION FOR PERMIT REVISION

Name of Permittee: <u>Centennial Na</u>	<u>tural Resources, LLC</u>
License Number: L-836	Permit Number: P-3765-01-21-S
Permit Expiration Date: 09-03-21	Mine Name: Lindbergh Mine No. 2
Revision Number: Revision R-23	<del>.</del>

Nature of Proposed Revision:

1) Revise the operations plan to include highwall mining of the final highwall.

Attach Detailed estimate of effect of proposed revision on reclamation costs.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

# STATE OF ALABAMA SURFACE MINING COMMISSION

( ) Permit Application for an Underground Coal Mine ( ) Permit Application for a Preparation Facility  PART I A. IDENTIFICATION  1.PERMIT APPLICANT Name: Centennial Natural Resources LLC Street Address: 113 Hollis Crump Drive
PART I A. IDENTIFICATION  1.PERMIT APPLICANT  Name: Centennial Natural Resources LLC  Street Address: 113 Hollis Crump Drive
Name: Centennial Natural Resources LLC
Name: Centennial Natural Resources LLC  Street Address: 113 Hollis Crump Drive
Name: Centennial Natural Resources LLC  Street Address: 113 Hollis Crump Drive
Street Address: 113 Hollis Crump Drive City: Jasper State: AL Zip: 35501  Mailing Address: P. O. Box 2420 City: Jasper State: AL Zip: 35502  Telephone Number: (205 ) 295-2224  Social Security Number (Voluntary): Employer Identification Number: 63-0799376  ASMC License#: L-836  2.ENTITY OR PERSON RESPONSIBLE FOR PAYING ABANDONED MINE LAND RECLAMATION FEES Name: Applicant Street Address: City: State: Zip:
Mailing Address: P. O. Box 2420 City: Jasper State: AL Zip: 35502  Telephone Number: (205 ) 295-2224 Social Security Number(Voluntary): Employer Identification Number: 63-0799376 ASMC License#: L-836  2.ENTITY OR PERSON RESPONSIBLE FOR PAYING ABANDONED MINE LAND RECLAMATION FEES Name: Applicant Street Address: City: State: Zip:
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Social Security Number(Voluntary):  Employer Identification Number: 63-0799376  ASMC License#: L-836  2.ENTITY OR PERSON RESPONSIBLE FOR PAYING ABANDONED MINE LAND RECLAMATION FEES  Name: Applicant  Street Address:  City: State: Zip:
Social Security Number(Voluntary):  Employer Identification Number: 63-0799376  ASMC License#: L-836  2.ENTITY OR PERSON RESPONSIBLE FOR PAYING ABANDONED MINE LAND RECLAMATION FEES  Name: Applicant  Street Address:  City: State: Zip:
Employer Identification Number: 63-0799376  ASMC License#: L-836  2.ENTITY OR PERSON RESPONSIBLE FOR PAYING ABANDONED MINE LAND RECLAMATION FEES  Name: Applicant  Street Address:  City: State: Zip:
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Name: Applicant Street Address: State: Zip:
Name: Applicant Street Address: State: Zip:
Street Address:City: State: Zip:
City: State: Zip: State: State: State: Zip: State:
Mailing Address:  City:  State: Zip:
City:State:Zip:
Telephone Number: ( )
Telebilone Namber (
Social Security Number(Voluntary):
Employer Identification Number:
ASMC License#:
3.IDENTIFY THE OPERATOR FOR THIS MINE IF DIFFERENT FROM THE PERMITTEE
Name: Applicant
Street Address:
City:State:Zip:
Mailing Address:
City:State:Zip:
Telephone Number: ()
Social Security Number(Voluntary):Employer Identification Number:
ASMC License#:
ASMC LICENSE#
4. CONTACT PERSON FOR PERMIT REVIEW ISSUES AND CORRESPONDENCE
Name: Pete Parrish c/o PERC Engineering Co., Inc.
Mailing Address: Post Office Box 1712
City: Jasper State: AL Zip: 35502-1712
Telephone Number: (205) 384-5553
1010phone hamber. ( 200 ) 001 0000
ALSO PLEASE COPY: Sammy Roberts, P.E.
113 Hollis Crump Drive
Jasper, AL 35501
Centennial Natural Resources, LLC

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### PART I C. PROPERTY OWNERSHIP, INTERESTS AND RIGHTS

#### 1. OWNERSHIP OF PROPERTY TO BE MINED AND RIGHT OF ENTRY.

INSTRUCTIONS: Show the property ownership boundaries of each parcel of land in the permit area on the permit map or an overlay of the same scale as the permit map. If the surface estate is severed from the mineral estate, show and describe the ownership of each estate separately. In the spaces below, identify:

- 1. Every current legal or equitable owner(s) of record (as found in a standard search of title) of the property;
- The holders of record of any leasehold interest in the property; and,
- Any purchaser of record under a real estate contract of the property.

Describe the basis of the applicant's legal right to enter and mine on all properties contained in the permit application. If the mineral estate has been severed from the surface estate, describe the basis of the legal right to enter and mine both the surface and mineral separately. Give the nature of such right (i.e. lease, deed, contract, etc.), where recorded, describe from whom, to whom, and the date executed, and whether that right is the subject of pending litigation.

#### USE ADDITIONAL SHEETS IN THE FORMAT BELOW AS NECESSARY

Page <u>1</u> of <u>3</u>					
Legal description of property or permit map symbol: NACRC (FEE) & (M)					
Surface/Mineral/or	Fee Simple	(both): Fee Sim	ple and Mine	eral	
Legal owner(s) of					
Address: 2000 Scha	fer Street,	<u>Suite D</u> City	: Bismarck	_State: <u>ND_</u> Zip: <u>58501</u>	
Holders of leaseho	ld interest:				
Address:	City	:	State: Z	ip:	
Purchasers under a	real estate	contract:			
Address:	Ci	ty:	State:	Zip:	
Description of rig Describe the type disturbance or min the right was gran	ht to enter of document ing. Indica ted. If the all grantor	or mine: or conveyance w te from whom th grantor of the s and grantees	hich grants e right was right is no of the righ	the right of entry, acquired and to whom	
	Granted From:	Granted To:	Date Granted:	Litigation Pending? (Yes or No) If yes, explain.	
Lease	North American Coal Royalty	Centennial Natural Resources, LLC	8/29/2003	No	

Company

Applicant: <u>Centennial Natural Resources LLC</u> Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### PART I C.1. (CONTINUED)

		Page <u>2</u> of <u>3</u>			
Surface/Mineral/or Legal owner(s) of	Fee Simple record: Alab	(both): Surface	nv		
Address: P. O. Box	2641	City: Bi	rmingham S	State: AL Zip: 35291 State:Zip:	
Address:		City:		State:Zip:	
Address:	Tear escare	City:		State:Zip:	
disturbance or min the right was gran	of document ing. Indicated. If the all grantor	or conveyance w te from whom th grantor of the s and grantees	e right was right is not of the right	the right of entry, acquired and to whom t the owner(s) of t beginning with the	
Describe Right of Entry (If deed indicate where recorded):	From: To: Granted: (Yes or No) If yes, explain.			Litigation Pending? (Yes or No) If yes, explain.	
Lease	Alabama Power Company	Centennial Natural Resources, LLC	2/21/2014	No	
Surface/Mineral/or Legal owner(s) of Address: 4245 Wood	Fee Simple record: John ruff Mill Ro	(both): Surface  J. Buckelew, J. ad City: Ad	r. amsville	J. Buckelew, Jr. (S)  State: AL Zip: 35005	
Holders of leaseho Address:		City:		State:Zip:	
Purchasers under a Address:	Purchasers under a real estate contract:				
Description of rig Describe the type disturbance or min the right was gran	of document ing. Indicated. If the all grantor	or mine: or conveyance w te from whom th grantor of the s and grantees	hich grants e right was right is not of the right	the right of entry, acquired and to whom	
Describe Right of Entry (If deed indicate where recorded):	Granted From:	Granted To:	Date Granted:	Litigation Pending? (Yes or No) If yes, explain.	
Lease	John J. Buckelew,	Centennial Natural	8/28/1997	No	

LLC

Applicant: <u>Centennial Natural Resources LLC</u> Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### PART I C.1. (CONTINUED)

		Page <u>3</u> of <u>3</u>		
<del></del>				
Surface/Mineral/or	Fee Simple	(both): Fee		Energy, LLC (Fee)
Legal owner(s) of Address: P. O. Box Holders of leaseho	2421	City: Ja	sper S	State: <u>AL</u> Zip: <u>35502</u>
Address.		CILY.		State:Zip:
Address:	real estate	City:		Zip:
Describe the type disturbance or min the right was gran	of document of ing. Indication in the contract of the contract	or conveyance white from whom the grantor of the standard and grantees	which grants be right was right is not of the right	the right of entry, acquired and to whom
Describe Right of Entry (If deed indicate where recorded):	Granted From:	Granted To:	Date Granted:	Litigation Pending? (Yes or No) If yes, explain.
Lease	Reed Energy, LLC.	Centennial Natural Resources, LLC	1/1/2012	No
Legal description of Surface/Mineral/or Legal owner(s) of Address:	Fee Simple record:	(both):		
Holders of leaseho	old interest:			
Address:		City:		State:Zip:
Address:		City:		State:Zip:
Description of right Describe the type disturbance or min the right was grant	ght to enter of document of document of ing. Indicated. If the of all grantors	or mine: or conveyance with the from whom the grantor of the is and grantees	which grants be right was right is not of the right	the right of entry, acquired and to whom t the owner(s) of t beginning with the
Describe Right of Entry (If deed indicate where recorded):	Granted From:	Granted To:	Date Granted:	Litigation Pending? (Yes or No) If yes, explain.
'	1	1	1	1

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### PART I C. (CONTINUED)

### 2. OWNERSHIP OF SURFACE AND MINERAL LANDS CONTIGUOUS TO THE AREA TO BE MINED INSTRUCTIONS:

Provide the information below for the owners of record of all surface and mineral properties contiguous to any part of the proposed permit area.

#### USE ADDITIONAL SHEETS AS NECESSARY IN THE FORMAT BELOW

#### PAGE <u>1</u> of <u>1</u>

Name: North American Coal Royalty Company Address: 2000 Schafer Street, Suite D City: Bismarck State: ND Zip: 58501 Interest owned (Surface, Coal or Fee Simple): Fee Type of Interest(Owner, Lease , or Other): Owner Name: Alabama Power Company Address: <u>P. O. Box 2641</u> City: Birmingham State: AL Zip: 35291 Interest owned (Surface, Coal or Fee Simple): <u>Surface</u> Type of Interest(Owner, Lease , or Other): Owner Name: John J. Buckelew, Jr. Address: 4245 Woodruff Mill Road City: Adamsville State: AL Zip: 35005 Interest owned (Surface, Coal or Fee Simple): Surface Type of Interest (Owner, Lease , or Other): Owner Name: Reed Energy, LLC Address: P. O. Box 2421 State: AL Zip: 35502-2421 City: Jasper Interest owned (Surface, Coal or Fee Simple): Surface Type of Interest (Owner, Lease , or Other): Owner

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### PART I C. (CONTINUED)

### 3. <u>INTERESTS OR PENDING INTERESTS IN LANDS CONTIGUOUS TO THE PERMIT AREA INSTRUCTIONS:</u>

Give the legal description of all lands contiguous to the permit area for which the for which the permit applicant:

- 1. Holds an interest,
- 2. Holds an option, or
- 3. Has made a bid for ownership, lease or other interest.

#### USE ADDITIONAL SHEETS AS NECESSARY IN THE FORMAT BELOW

					PAGI	<b>Ξ</b>	OF	 Not	Appl	Licab	le		
Legal	des	scrip	tion:										
Descr	ibe	the	natur	e of	the	inte	rest:						
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Descr	ibe	the	natur	e of	the	inte	rest:						

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-3765 Revision R-23

#### PART I D. PERMIT AREA INFORMATION

1. Give the requested term of this permit: 5 years.

2. Give the legal description of the land upon which the applicant proposes to conduct surface coal mining operations. List each quarter-quarter section, section, township, range, and county.

SW 1/4 of SE 1/4, SE 1/4 SW 1/4, NE 1/4 of SW 1/4, NW 1/4 of SW 1/4, SW 1/4 of SW 1/4 of Section 26; NE 1/4 of SE 1/4, SE 1/4 of SE 1/4, SW 1/4 of SE 1/4, SE 1/4 of SW 1/4 of Section 27, NE 1/4 of NW 1/4, NW 1/4 of NE 1/4, NE 1/4 of NE 1/4, SE 1/4 of NE 1/4, NE 1/4 of NE 1/4, SE 1/4 of NE 1/4, SE 1/4 of SE 1/4, SW 1/4 of SE 1/4, SW 1/4 of SE 1/4, SE 1/4 of SE 1/4, NE 1/4 of SE 1/4, SW 1/4 of SE 1/4, NE 1/4 of NW 1/4, NW 1/4 of NW 1/4, NW 1/4 of NW 1/4, NE 1/4 of NE 1/4, NE 1/4 of NE 1/4, SE 1/4 of SE 1/4, SW 1/4 of NE 1/4, NE 1/4 of SE 1/4, NE 1/4 of SE 1/4, NE 1/4 of SE 1/4, SW 1/4 of SE 1/4, SW 1/4 of SE 1/4, SW 1/4 of SE 1/4, SE 1/4 of SE 1/4, SW 1/4 of SE 1/4, SE 1

- 3. Give the acreage of the permit, each increment and the type of bonding.
  - a. Total revision acreage: 979 acres
  - b. Give the acreage and type of bond for each mining increment:

<u>Increment</u>	<u>Acres</u>	Type Bond Proposed
1.	142	Surety
2.	437	Surety
3.	4	Phase III Bond Release
4.	102	Surety
5.	88	Phase III Bond Release
6.	68	Surety
7.	<u> 138</u>	Surety

- c. Identify the increment(s) on which mining will initially begin upon issuance of this permit: <u>Increment No. 2</u>
- 4. Has any acreage in the proposed permit area been previously disturbed by mining? ( )YES ( )NO  $\rm N/A$

If yes, supply the following for any and all previously disturbed areas:

- a. Show the boundaries of the previously disturbed area(s) on the permit map and identify with an appropriate symbol.
- b. List, for each area, the permit number under which it was disturbed and the number of acres. Indicate the status of each permit as Unreleased, Grading released, or 100% released.(If no permit, indicate as such.)
- c. For each area which has not been reclaimed or received a 100% release, indicate whether you intend to assume responsibility for reclamation of the area under this permit and its performance bond(s).
- 5. Is disturbance to be conducted within 300 feet, measured horizontally from an occupied dwelling? ( )YES (XXX)NO. N/A

If YES, attach a signed waiver from the owner of the dwelling indicating the minimum distance disturbance will be allowed by the owner.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-3765 Revision R-23

#### PART I D. (CONTINUED)

- 6. Is disturbance proposed within 100 feet of a public road right-of-way or will a public road be closed or relocated? ( ) YES (XX) NO. If YES, enclose a copy of the approval granted by the government entity which has jurisdiction over the road. The approval must state the minimum distance disturbance will be allowed to the road or road right-of-way. See Attachment I D. 6.
- 7. List all other licenses and permits required to conduct mining operations including, but not limited to, MSHA I.D. and NPDES. Give the identification or permit number, the name and address of the issuing authority, and the status or date of approval or issuance of each:

  Permit ID or Permit Issuing Address Status or Number Authority of issuance

 Number
 Authority
 of issuance

 MSHA ID
 01-03182
 MSHA
 \*
 8/3/1991

 NPDES
 AL0070211
 ADEM
 \*\*
 5/2/2015

\* 1030 London Drive, Suite 400, Birmingham, AL 35211-4542

\*\* 1400 Coliseum Boulevard, Montgomery, AL 36110-2059

8. Is the property in the permit covered by zoning or other land use restrictions?

( )YES (XXX)NO.

If yes, indicate the jurisdictional authority and zoning or landuse area. If more than one zoning classification exists for the permit area, identify the boundaries of each the permit map.

Jurisdictional	Zoning	Allows mining?
Authority	Classification	Yes or No

- 9. Describe access to the proposed mine from a known point on the nearest public highway: From Parrish travel south on Alabama Highway 269 approximately 7.6 miles to the intersection of Alabama State Highway 269 and the Mary Lee Road, turn left onto the Mary Lee Road and travel approximately 1.3 miles to the mine entrance on the left. The boundaries of the permit area will be marked and signs will be posted.
- 10. Did the applicant receive assistance from the Small Operator Assistance Program in preparing this application?

( )YES (XXX)NO

If YES, list SOAP I.D. Number:

11. Submit a certificate of proof of Liability Insurance with this application. See AMC Master File

#### PART I E. PUBLIC NOTICE AND AVAILABILITY FOR INSPECTION

- 12. Give the name of the approved public office in which a copy of this application will be filed for public inspection following notification of completeness: A copy of the permit revision application is available for public inspection at the Alabama Surface Mining Commission website <a href="http://surface-mining.alabama.gov">http://surface-mining.alabama.gov</a>.
- 13. Enclose a copy of the notice of filing of this application which will appear in a newspaper of general circulation in the vicinity of the mine and identify the name of the newspaper: See Attachment I.-E.-13. which is proposed to be published in the Birmingham News newspaper.

### Application For Jefferson County Assent To Vacation Of Right Of Way



KNOW ALL MEN BY THESE PRESENTS THAT: Whereas the undersigned parties are owners of all the property abutting, or in any way served by the property herein described, and own all of the lands abutting on or touching said property, and as such owners are desirous of vacating all the property herein described, as provided by the Statutes of Alabama, particularly Section 23-4-1 et. seq., Code of Alabama (1975).

Now THEREFORE, the undersigned parties, being the owners of all the lands abutting on the following described property:

#### Elbo Porter Road (aka Porter Road) and Forrester Road Vacation

Commence in the NW 1/4 of the SE 1/4 of Section 34, Township 16 South, Range 5 West, Jefferson County, Alabama, at a point lying 40 feet southeasterly and perpendicular to the currently existing centerline of Short Creek Road for the point of beginning of the prescriptive right-of-way of Elbo Porter Road to be vacated; thence run southeasterly along the centerline of Elbo Porter Road thru said 1/4-1/4 section; thence southeasterly and easterly along said centerline thru the SW 1/4 of the SE 1/4 of said Section; thence easterly, southeasterly, and southerly along said centerline thru the SE 1/4 of the SE 1/4 of said Section; thence southerly and southeasterly along said centerline thru the NE ¼ of the NE ¼ of Section 3, Township 17 South, Range 5 West; thence southeasterly, southerly and southwesterly along said centerline thru the NW 1/4 of the NW 1/4 of Section 2, Township 17 South, Range 5 West; thence southwesterly along said centerline thru the NE 1/4 of the NE 1/4 of said Section 3; thence southwesterly, southerly and southeasterly along said centerline thru the SE 1/4 of the NE 1/4 of said Section 3; thence southeasterly along said centerline thru the SW 1/4 of the NW 1/4 of said Section 2; thence southeasterly, southerly and southwesterly along said centerline thru the NW ¼ of the SW ¼ of said Section 2; thence southwesterly, southerly and southeasterly along said centerline thru the SW ¼ of the SW ¼ of said Section 2; thence southeasterly along said centerline thru the SE ¼ of the SW 1/4 of said Section 2; thence southeasterly, southerly and southwesterly along said centerline thru the NE 1/4 of the NW 1/4 of Section 11, Township 17 South, Range 5 West; thence southwesterly, southerly and southeasterly along said centerline thru the SE  $\frac{1}{4}$  of the NW  $\frac{1}{4}$  of said Section 11; thence southeasterly and easterly along said centerline thru the NW ¼ of the SE 1/4 of said Section 11; thence easterly and southeasterly along said centerline thru the NE 1/4 of the SE ¼ of said Section 11; thence southeasterly along said centerline thru the SE ¼ of the SE 1/4 of said Section 11; thence southeasterly along said centerline thru the SW 1/4 of the SW 1/4 of Section 12, Township 17 South, Range 5 West to the Sylvan Springs corporate limit and the end of said right-of-way.

Also that part of the prescriptive right-of-way of Elbo Porter Road in the NW ¼ of the NE ¼ of Section 24, Township 17 South, Range 5 West, Jefferson County, Alabama, lying between the corporate limits of Sylvan Springs and Maytown.

Also the right-of-way of Elbo Porter Road conveyed to Jefferson County by Deed Volume 1710 page 150 as recorded in the Probate Office of Jefferson County, Alabama and being more particularly described as follows:

Commence at the NE corner of the SE ¼ of the NE ¼ of Section 3 Township 17 South Range 5 West, Jefferson County, Alabama and run westerly along the North line of said ¼ - ¼ section a distance of 545.7 feet; thence turn left an angle of 102°59' and run southeasterly a distance of 448.4 feet to the point of beginning of a 50 foot wide right-of-way lying 25 feet each side of, parallel to and abutting the following described line; thence continue along the last described course a distance of 227.2 feet to the point of beginning of a 14° curve to the left having a central angle of 28°40'; thence run southeasterly along the arc of said curve a distance of 205.26 feet to the end of said curve; thence run southeasterly along the extended tangent of said curve a distance of 174.8 feet to the point of beginning of a 35° curve to the left having a central angle of 65°46'; thence run easterly along the arc of said curve a distance of 190.84 feet to the end of said curve; thence run easterly along the extended tangent of said curve a distance of 12.3 feet to the point of beginning of a 40° curve to the right, having a central angle of 10°34'; thence run easterly along the arc of said curve a distance of 26.99 feet to the end of said curve and the end of said right-of-way.

Also the right-of-way of Elbo Porter Road conveyed to Jefferson County by Deed 2491 page 147 as recorded in the Probate Office of Jefferson County, Alabama and being more particularly described as follows:

A right-of-way located in the NE ¼ of the SE ¼ and the SE ¼ of the SE ¼ both in Section 11, Township 17 South, Range 5 West in Jefferson County, Alabama and being of the width of 50 feet being 25 feet on each side of the following described centerline:

Commence at the Southeast corner of SE ¼ of SE ¼ in said Section 11, Township 17 South, Range 5 West and run North along the section line for a distance of 535.2 fest to the center of the old road; thence with an angle of 41° 30′ to the left for a distance of 130.3 feet; thence with an angle of 31° 0′ to the right for a distance of 210.9 feet; thence with an angle of 31° 12′ to the left for a distance of 228 feet; thence with an angle of 15° 0′ to the right for a distance of 63 feet to a point which point is the beginning of the center line of the right of way to be herein granted; thence, from said point of beginning, with a 22° curve to the left a distance of 143.6 feet; thence with a line tangent to said curve and crossing the North line of said SE ¼ of SE ¼, a distance of 491.9 feet to the point of beginning of a 10° curve to the right; thence with said 10° curve a distance of 201.3 feet to a point in said old road which is the end of the center line of said right of way herein granted.

Also all the prescriptive right-of-way of Forrester Road, said right-of-way lying in the NW ¼ of the NW ¼ and the NE ¼ of the NW ¼, all being in Section 2, Township 17 South Range 5 West, Jefferson County, Alabama.

do hereby declare the above property vacated and annulled, and all public rights and easements therein divested of the property, subject, however, to all existing rights-of-way or easements for public utilities and to all utility facilities presently situated in said area vacated subject to this provision.

The undersigned owners further declare that after vacation of the said public road located as above described, and all public rights and easements therein, convenient means of ingress and egress to and from the property will be afforded to all other property owners owning property in or near the tract of land embraced in said map, plat, or survey by the remaining streets, avenues, or highways dedicated by said map, plat, or survey.

IN TESTIMONY AND WITNESS WHEREOF, affixed their hands and seals to this declaration, 2013.	
C & H MINING COMPANY, INC.	ALAWEST AL, L.L.C.
BY: Donald Oth-Kls	BY: Len R Sylor
ITS: President	ITS: MAHAGEN
FRESHWATER LAND TRUST	BOONIE INVESTMENTS, L.L.C
BY: Brain & Sushing	BY: Greber Rhellyn ITS: Drawler
BY: Brain A. Rushim  ITS: CONOCENTION DIRECTOR	ITS: Drevolur
PALOS, L.L.C	
BY: A S. Roberts, Manager of Engineering, Receident Agent for Palos, L.L.C.	ed Minerals
Ben F. Black (L.S.)	(L.S.)
Joy S. Black (L.S.)	(L.S.)

JEFFERSON COUNTY )	
I, THE UNDERSIGNED AUTHORITY, in and hereby certify that Andle Q. Gambles.	for said County, in said State,  whose name as <u>factors</u> mpany, Inc., is signed to the
foregoing conveyance, and who is known to me, acknown being informed of the contents of the conveyance, he, as authority, has executed the same voluntarily for and as	wledged before me on this day that, s such officer, and with full
Given under my hand and official seal, this	day of <i>Marenda</i> .,2013.
<u>Co</u>	nita Williams
My	Notary Public Commission Expires:
IVIY	MY COMMISSION EXPIRES 9/30/17
STATE OF ALABAMA )	
JEFFERSON COUNTY )	
I, THE UNDERSIGNED AUTHORITY, in and hereby certify that	for said County, in said State,  whose name as
conveyance, and who is known to me, acknowledged be informed of the contents of the conveyance, he, as such executed the same voluntarily for and as the act of said	fore me on this day that, being officer, and with full authority, has
Given under my hand and official seal, this	day of November, 2013.
	tal w Oak
My	Notary Public  MY COMMISSION EXPIRES 3-5-2016  Commission Expires:
STATE OF ALABAMA )	
JEFFERSON COUNTY )	
I, THE UNDERSIGNED AUTHORITY, in and hereby certify that Brion RUSHING of the Freshwater Land conveyance, and who is known to me, acknowledged be informed of the contents of the conveyance, he, as such executed the same voluntarily for and as the act of said	whose name as <u>Conservation</u> Trust, is signed to the foregoing efore me on this day that, being officer, and with full authority, has
Given under my hand and official seal, this	t day of December, 2013.
My	Notary Public Commission Expires:

STATE OF ALABAMA)

JEFFERSON COUNTY )
I, THE UNDERSIGNED AUTHORITY, in and for said County, in said State, hereby certify that
STATE OF ALABAMA )
JEFFERSON COUNTY )
I, THE UNDERSIGNED AUTHORITY, in and for said County, in said State, hereby certify that Robert S. Roberts, Manager of Engineering, Reed Minerals whose name as Resident Agent for the Palos, L.L.C., is signed to the foregoing conveyance, and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he, as such officer, and with full authority, has executed the same voluntarily for and as the act of said Corporation.  Given under my hand and official seal, this 13 day of Notary Public My Commission Expires:  MY COMMISSION EXPIRES 9/30/17
STATE OF ALABAMA)
JEFFERSON COUNTY )
I, THE UNDERSIGNED AUTHORITY, in and for said County, in said State, hereby certify that <u>Ben F. Black and Joy S. Black</u> whose name(s) <u>are</u> is signed to the foregoing conveyance, and who known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, executed the same voluntarily on the day the same bears date.  Given under my hand and official seal, this <u>15</u> day of <u>November</u> , 2013.
Motary Public  My Commission Expires: 6/18/17

STATE OF ALABAMA)

### NOTICE OF VACATION OF LANDS OR INTEREST IN LANDS

Notice is hereby given that a resolution was presented to and approved by the County Commission of Jefferson County, Alabama, at its meeting on Friday, the 31st day of January, 2014 at 9:00 a.m. in the Chambers of the County Commission of Jefferson County, Alabama, at the Courthouse in Bessemer, Alabama, vacating the following described: Alabama, vacating the following described

Allabama, Vacating the following described property:
Elbo Porter Road (aka Porter Road) and Forrester Road Vacation
Commence in the NW ¼ of the SE ¼ of Section 34, Township 16 South, Range 5 West, Jefferson County, Alabama, at a point lying 40 feet southeasterly and perpendicular to the currently existing centerline of Short Creek Road for the point of beginning of the prescriptive right-of-way of Elbo Porter Road to be vacated; thence run southeasterly along the centerline of Elbo Porter Road thru said ¼-¼ section; thence southeasterly along said centerline thru the SE ¼ of said Section; thence southeasterly along said centerline thru the SE ¼ of said Section; thence southerly and south-easterly along said centerline thru the NE ¼ of the NE ¼ of Section 3, Township 17 South, Range 5 West; thence southeasterly, southerly and southwesterly along said centerline thru the NE ¼ of the NE ¼ of said Section 3; thence southwesterly along said centerline thru the NE ¼ of said Section 3; thence southwesterly along said centerline thru the NE ¼ of said Section 3; thence southwesterly along said centerline thru the NE ¼ of said Section 3; thence southeasterly along said centerline thru the SW ¼ of the NW ¼ of said Section 3; thence southeasterly along said centerline thru the SW ¼ of the NW ¼ of said Section 2; thence southeasterly along said centerline thru the SW ¼ of the SW ¼ of said Section 2; thence southwesterly, southerly and southwesterly along said centerline thru the NW ¼ of the SW ¼ of said Section 1; thence southwesterly along said centerline thru the SW ¼ of said Section 1; thence southeasterly along said centerline thru the SW ¼ of said Section 1; thence southeasterly along said centerline thru the NW ¼ of said Section 1; thence southeasterly along said centerline thru the NW ¼ of said Section 1; thence southeasterly along said centerline thru the NW ¼ of said Section 1; thence southeasterly along said centerline thru the SW ¼ of said Section 1; thence southeasterly along said centerline thru the SW ¼ of the

terly along the arc of said curve a distance of 205.26 feet to the end of said curve; thence run southeasterly along the extended tangent of said curve a distance of 174.8 feet to the point of beginning of a 55° curve to the left having a central angle of 65°46°; thence run easterly along the arc of said curve a distance of 190.84 feet to the end of said curve; thence run easterly along the extended tangent of said curve a distance of 12.3 feet to the point of beginning of a 40° curve to the right, having a central angle of 10°34°; thence run easterly along the arc of said curve a distance of 26.99 feet to the end of said curve and the end of said right-of-way. Also the right-of-way of Elbo Porter Road conveyed to Jefferson County by Deed 2491 page 147 as recorded in the Probate Office of Jefferson County, Alabama and being more particularly described as follows:
A right-of-way located in the NE 1¼ of the SE ¼ and the SE ¼ of the SE ¼ both in Section 11, Township 17 South, Range 5 West in Jefferson County, Alabama and being of the width of 50 feet being 25 feet on each side of the following described centerline:
Commence at the Southeast corner of SE ¼ of SE ¼ in said Section 11, Township 17 South, Range 5 West and run North along the section line for a distance of 535.2 fest to the center of the old road; thence with an angle of 31° 12' to the left for a distance of 130.3 feet; thence with an angle of 31° 12' to the left for a distance of 143.6 feet; thence with an angle of 14° 50' to the right for a distance of 63 feet to a point which point is the beginning of the center line of the right of way to be herein granted; thence, from said point of beginning, with a 22° curve to the left a distance of 143.6 feet; thence with a line tangent to said curve and crossing the North line of said SE ¼ of SE ¼, a distance of 491.9 feet to the point of beginning of a 10° curve a distance of 201.3 feet to a point in said old road which is the end of the center line of said right-of-way lying in the North SE ¼ of SE ¼, a dis

20140212000120660 3/3 Bk: LR201410 Pg:27634 Jefferson County,Alabama 02/12/2014 12:45:17 PM AFF Fee - \$22.00

Total of Fees and Taxes-\$22.00 LYNN

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

Attachment I.-E.-13.

#### PUBLIC NOTICE OF FILING OF PERMIT REVISION APPLICATION

In accordance with the provisions of Act No. 81-435 of the State of Alabama and the regulations promulgated under this act, Centennial Natural Resources, LLC., 113 Hollis Crump Drive, Jasper, AL 35501, hereby gives notice that it has filed an application with the Alabama Surface Mining Commission to revise permit P-3765 for its Lindbergh No. 2 Mine located in Jefferson County, Alabama. The area to be effected by the revision is: SW 1/4 of SE 1/4, SE 1/4 SW 1/4, NE 1/4 of SW 1/4, NW 1/4 of SW 1/4, SW 1/4 of SW 1/4 of Section 26; NE 1/4 of SE 1/4, SE 1/4 of SE 1/4, SW 1/4 of SE 1/4, SE 1/4 of SW 1/4 of Section 27, NE 1/4 of NW 1/4, NW 1/4 of NE 1/4, NE 1/4 of NE 1/4, SE 1/4 of NE 1/4, SW 1/4 of NE 1/4, SE 1/4 of NW 1/4, NW 1/4 of SE 1/4, SW 1/4 of SE 1/4, NE 1/4 of SE 1/4, SE 1/4 of SE 1/4 of Section 34; NW 1/4 of NW 1/4, NE 1/4 of NW 1/4, NW 1/4 of NE 1/4, NE 1/4 of NE 1/4, SE 1/4 of NE 1/4, SW 1/4 of NE 1/4, SE 1/4 of NW 1/4, SW 1/4 of NW 1/4, NW 1/4 of SW 1/4, NE 1/4 of SW 1/4, NW 1/4 of SE 1/4, NE 1/4 of SE 1/4, SE 1/4 of SE 1/4, SW 1/4 of SE 1/4, SE 1/4 of SW 1/4, SW 1/4 of SW 1/4 of Section 35; NW 1/4 of SW 1/4, SW 1/4 of NW 1/4, NW 1/4 of NW 1/4, SE 1/4 of NW 1/4 of Section 36, all in Township 16 South, Range 5 West and NW 1/4 of NW 1/4, NE 1/4 of NW 1/4 of Section 2; NE 1/4 of NE 1/4 of Section 3, all in Township 17 South, Range 5 West Jefferson County, Alabama.

The Revision consists of changing the Operations Plan to include highwall mining of the final highwall.

A copy of the permit revision application is available for public inspection at the Alabama Surface Mining Commission website http://surface-mining.alabama.gov. Written comments, objections, or requests for informal conferences should be submitted to the Alabama Surface Mining Commission, P.O. Box 2390, Jasper, Alabama 35502-2390, within 30 days from the last publication of this notice.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### Part III - Operation Plan

#### A. <u>General Operation Information</u>

1. Describe the type and method of coal mining procedures and major equipment to be used. (780.11)

See original permit application and subsequent revisions.

Major equipment to be used includes but may not be limited to:

- Backhoes - Service Trucks

- Bulk Anfo Trucks - Dozers

Off Road Haulers - Track BackhoesLoaders - Highwall Miner

- Drills

2. Describe the sequence and timing of increments to be mined (as shown on permit map) over the total life of the permit. (780.11)

The timing increments are as follows:

Increment No.	Acres	From	Estimate Life
2	437	Currently Being Mined	18 Months
7	138	End of Inc. No. 2	24 Months
6	68	Issuance of Revision	Life of Permit
4	102	Reclamation Phase	
1	142	Reclamation Phase	
5	88	Phase III Release	
3	4	Phase III Release	

The sequence of mining operations will not be effected by this revision.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

### <u>ATTACHMENT III.-A.-1.</u> TYPE AND METHOD OF COAL MINING PROCEDURES

The area method of surface mining has been used to mine the economically recoverable coal in the Lindbergh Mine No 2. ASMC Permit P-3765. Having reached the limits of mining of economically recoverable coal by conventional surface mining methods, highwall mining is proposed to be conducted along the existing highwall in an effort to maximize coal recovery.

Highwall mining will be performed with holes driven into the existing highwall located in the SW 1/4 of the NE 1/4 of Section 35, Township 16 South, Range 5 West and the highwall mining operation will progress westerly and northwesterly along the existing highwall. Holes will be aligned generally in a southeasterly direction initially and will be "fanned" as necessary to maximize coal recovery as mining progresses along the existing highwall until reaching its end near Short Creek Road in the NW 1/4 of the SE 1/4 of Section 34, Township 16 South, Range 5 West.

The maximum depth into the wall that the miner is capable of penetrating varies and is dependent on the hardness of the material, the consistency of the coal bed, whether flat or rolling, and other site conditions. The highwall miner that is proposed to be used has the capability to mine into the wall a maximum of 1,600 feet. The highwall miner head will take a cut 9.5 feet wide by variable height. A web pillar will remain between each opening. Barrier pillars will be left at the ends of a series of highwall miner holes. See Attachment III-A-1(a), Highwall Mining Layout for dimensions of layout for both the Pratt and American 1, 2, and 3 Coal Seams.

Highwall mining will be performed in such a manner that provides adequate support pillars between each hole. Spacing of the recovery holes will vary depending on the nature of the overburden, depth of the overburden and coal seam thickness and is specifically shown later in this application. Highwall mining will be performed on the Pratt and American 1, 2, and 3 Coal Seams. The Pratt Seam lies above the American 1 Seam an average of approximately 60 feet within the area proposed for highwall mining. The American 1, 2, and 3 Seams will be highwall mined first with backfill of the highwall occurring behind the highwall mining operation up to the level of the Pratt Seam. Timing of the backfill of the highwall to the Pratt Seam level will follow, as closely as practicable, the American Seams highwall mining, but will remain far enough behind the active mining operation to provide for safe and efficient operations. After mining of the American 1, 2, and 3 Seams, highwall mining operations will move

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

to the Pratt Seam and will follow the same process as the initial mining of the American Seams, with final reclamation of the Pratt Seam highwall following the mining operations as closely as safe and efficient operation procedures will allow.

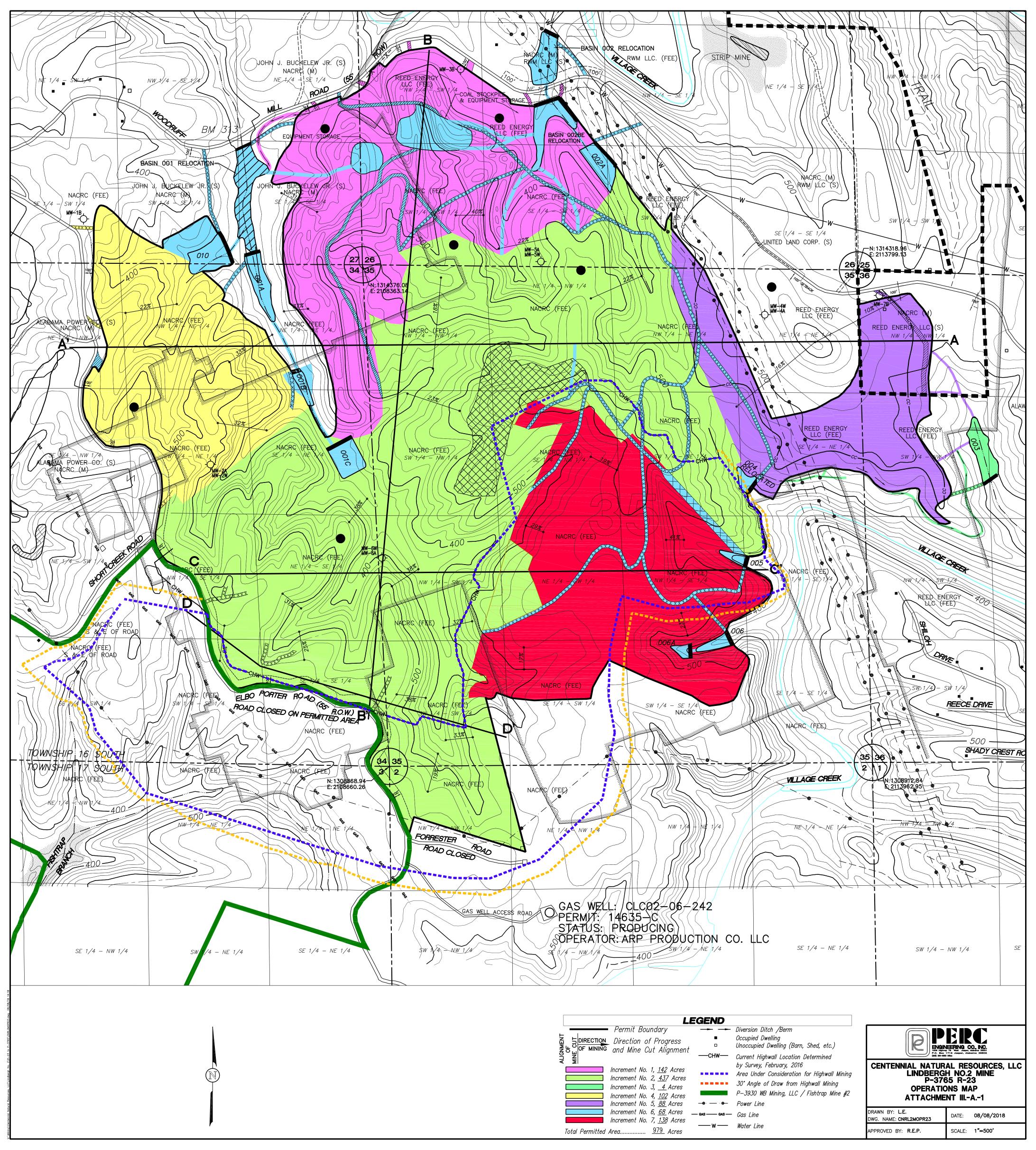
Highwall miner holes shall be sealed with an impervious, noncombustible material, as contemporaneously as practicable with the highwall miner operation, as approved by the Regulatory Authority, if the holes are not discharging water containing acid or toxic-forming material. In order to minimize disturbances of surface and ground water, each miner hole shall be sealed within 72 hours with an impervious, non-combustible material if the holes are discharging water containing acid or toxic-forming If sealing is not possible within 72 hours, the discharge shall be treated commencing within 72 hours after completion, to assure that water quality standards for water leaving the site are maintained and are not compromised until the holes are sealed. Each highwall miner entry will be sealed by backfilling with impervious, non-combustible clay material to a minimum of four feet above the top of the entry and compacted to provide an impervious seal prior to the backfilling and reclamation of the final highwall. See Attachment III-A-6.

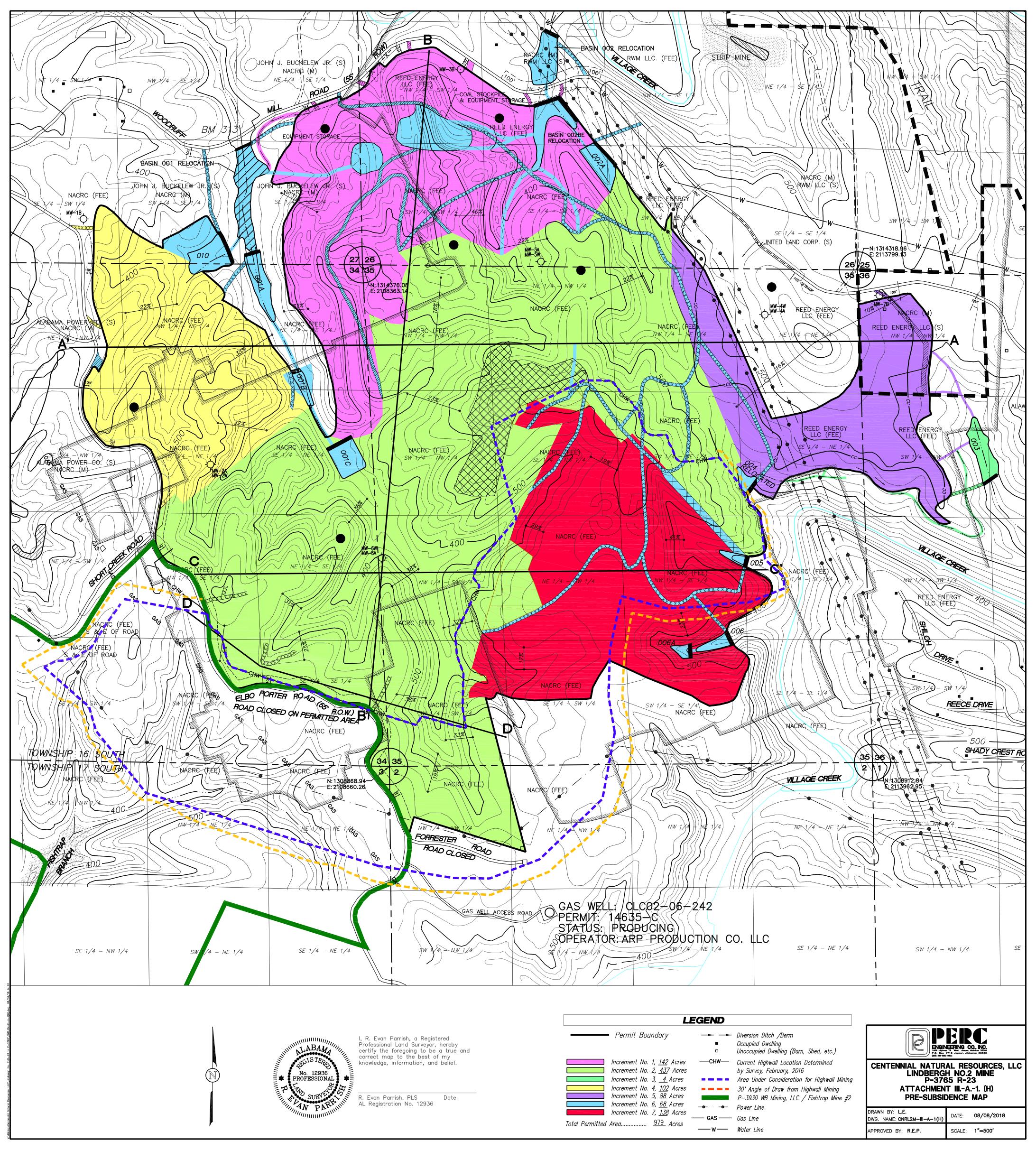
See Attachment III-A-1 Operations Map.

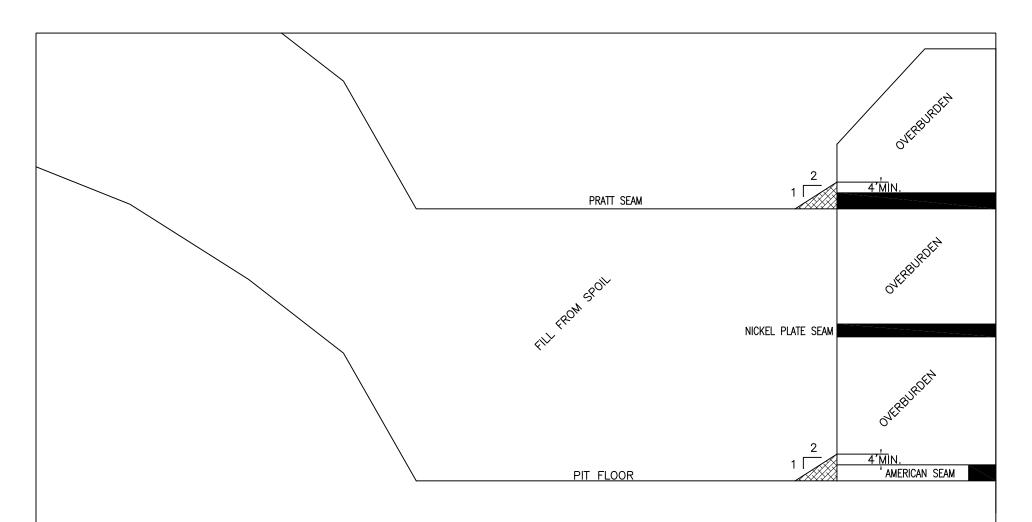
See Attachment III-A-1(H) Pre-subsidence Map.

See Attachment III-A-6 Sealing of Highwall Miner Holes.

See Attachment III-A-1(a) Highwall Mining Layout.

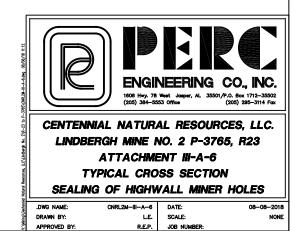




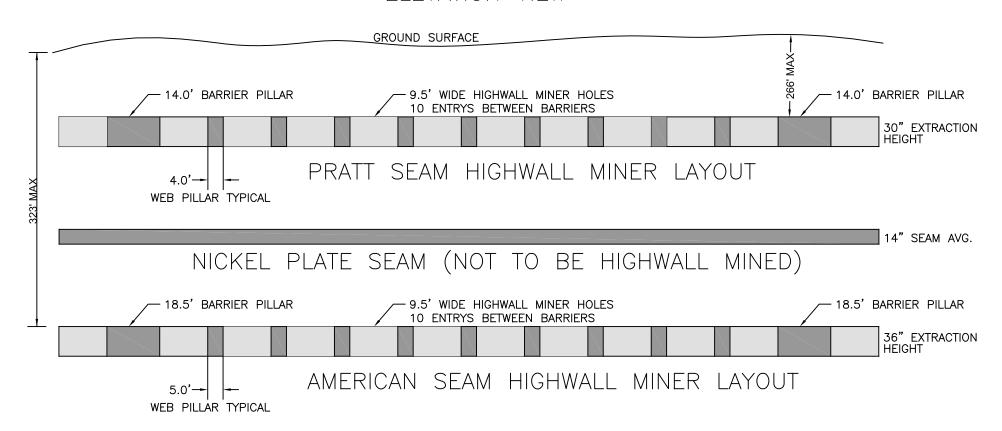


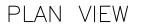
CLAY MATERIAL

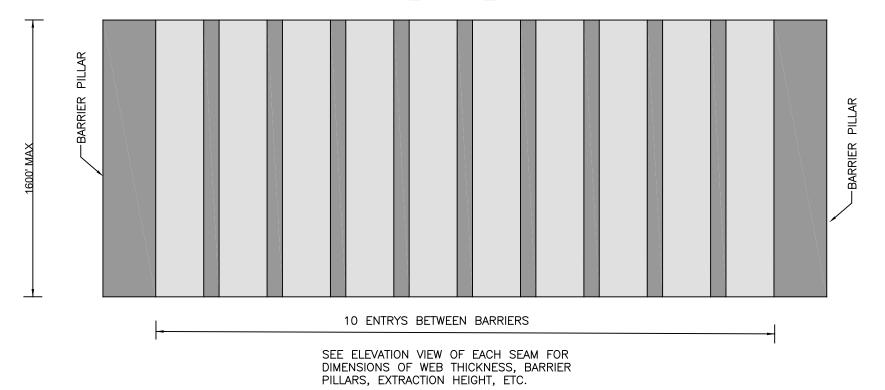
PRIOR TO THE BACKFILLING THE FINAL HIGHWALL ALL HIGHWALL MINER HOLES WILL BE SEALED WITH A NON TOXIC, NON—ACID FORMING CLAY MATERIAL. THIS CLAY MATERIAL WILL BE COMPACTED TO PROVIDE AN IMPERVIOUS SEAL AND WILL BE CONSTRUCTED TO A MINIMUM OF FOUR (4) FEET ABOVE THE TOP OF THE OPENING.

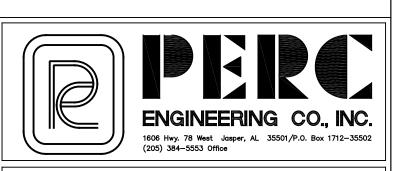


### ELEVATION VIEW









CENTENNIAL NATURAL RESOURCES, LLC.
LINDBERGH NO. 2, P-3765, R-23
ATTACHMENT III-A-1(a)
HIGHWALL MINING LAYOUT

08-06-2018

NONE

.DWG NAME:	CNRL2M-III-A-1	DATE:
DRAWN BY:	L.E.	SCALE:
APPROVED BY:	RED	JOR NUMBER:

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

6. Give a description, including appropriate cross-sections and maps, of measures to be used to seal or manage mine openings, bore holes, wells and other openings within the proposed permit area. (780.18, 816.13-816.15)

See original permit and subsequent revisions for information on sealing of mine openings, bore holes, wells, and other openings. See Attachment III-A-6 for typical illustration of methods to be used to seal highwall miner holes.

7. Give a description of steps to be taken to comply with applicable water quality laws, regulations and health and safety standards. (780.18)

See original P-3765 Permit Application and subsequent revisions.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### Permit Application for Auger Mining

In addition to completing all <u>applicable</u> portions of the "Permit Application for Surface and Underground Mining", anyone who intends to conduct auger mining operations shall complete the following: (785.20, 819)

(a) Give the diameter, depth, and spacing of auger holes including width of barrier pillars to be left between holes or series of holes.

Seam	Width of Highwall Miner Cut	Depth of Cover	Extraction Height	Web Width	Barrier Width	Number of Holes Between Barrier
Pratt	9.5'	266'	2.5'	4.0'	14.0'	10
American	9.5'	323'	3.0'	5.0'	18.5'	10

See Attachment III.-A.-1.(a)., Typical Highwall Mining Layout

(b) Is underground mining to be conducted in the immediate area following completion of auger mining operations?( ) Yes ( X ) No

If  $\underline{\text{yes}}$ , describe the steps to be taken to provide access for such operations to the remaining coal reserve.

(c) Is auger mining to be conducted contemporaneously with underground mining operations and in the same seam?

( ) Yes ( X ) No

If <u>yes</u>, describe the measures to be taken to prevent 'breaking through' into underground workings.

- (d) Is auger mining to be conducted:
  - (1) In conjunction with an active surface mining operation?
     (X) Yes ( ) No
  - (2) In an in-active surface mine? ( ) Yes (X) No
  - (3) Along a natural outcrop which has not been previously disturbed?

( ) Yes (X) No

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

(e) Describe in detail the measures to be taken to reclaim the highwall if augering is <u>not</u> being conducted in conjunction with a surface mining operation.

Completion of contouring, backfilling, grading, including final elimination of the highwall, shall follow the same requirements as the previously approved reclamation schedule. See Part IV for Reclamation Plan

(f) Describe and locate on the permit map all the power lines, pipelines, buildings and other facilities located above the proposed auger mining operation. If subsidence resulting from auger mining is anticipated, describe in detail the measures to be taken to prevent or mitigate adverse effects on surface structures and facilities.

All power lines, pipelines, buildings, roads and other facilities are shown on the permit map. No subsidence is anticipated due to the spacing of the holes and the barrier pillars to be left. There are no groundwater users within one-half mile of the proposed mining area. See Permit Map.

A significant portion of the permit area is underlain by the Jim Walter Resources Bessie Mine, as shown on the permit map, operations map and pre-subsidence map for this permit, which targeted the Mary Lee Coal Seam. No adverse effects from the existence of the Bessie Mine have occurred during the life of mining on P-3765 and none are anticipated due to the introduction of highwall mining by this permit revision.

Two structures, previously occupied dwellings, are located in the NE 1/4 of NW 1/4 of Section 2, Township 17 South, Range 5 West. These previously occupied dwellings, along with the property they occupy, are owned by North American Coal Royalty Company, as shown in Part I of this application, have been vacated, and are no longer occupied dwellings. No other buildings or structures exist within the area shown by the Permit Map.

There are no domestic wells in use within one-half mile of the proposed mine area or the 30 degree angle of draw projected therefrom. No subsidence is anticipated due to the spacing of the holes and the barrier pillars to be left.

A producing methane gas well exists well outside the 30 degree angle of draw on the south end of the area to be mined and is shown on the mapping. The well name is CLC 02-06-242, permit number 14635-C and its operator as listed on

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

the Alabama Oil and Gas Board is ARP Production Company, LLC, 1000 Commerce Drive,  $4^{\rm th}$  Floor, Pittsburgh, PA 15275.

Elbo Porter Road and Forrester Road, previously owned and maintained by Jefferson County, have been closed and their rights-of-way vacated. See Attachment I.-D.-6.

The land overlying the area to be highwall mined is undeveloped/no current use. Trees are the only renewable resource within the area to be highwall mined. Since tree harvesting operations typically operate on irregular terrain, subsidence would have to be very substantial in order to impact tree harvesting operations. Subsidence of that magnitude is not likely since the total height of the coal recovery holes is 5.5'. In the event renewable resources are impacted, the subsidence will be repaired as necessary. See Part III-H.

Design of the highwall miner hole layout was done using the NIOSH ARMPSHWM program. In the highly unlikely event that subsidence occurs and causes material damage to any renewable resources lands Centennial Natural Resources, LLC will repair the materially damaged land to its condition existing before subsidence, or the owner will be compensated for any damage.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### Narrative Description of Auger/Highwall Mining Operation

The area method of surface mining has been used to mine the economically recoverable coal in the Lindbergh Mine No 2. ASMC Permit P-3765. Having reached the limits of mining of economically recoverable coal by conventional surface mining methods, highwall mining is proposed to be conducted along the existing highwall in an effort to maximize coal recovery.

Highwall mining will be performed with holes driven into the existing highwall located in the SW 1/4 of the NE 1/4 of Section 35, Township 16 South, Range 5 West and the highwall mining operation will progress westerly and northwesterly along the existing highwall. Holes will be aligned generally in a southeasterly direction initially and will be "fanned" as necessary to maximize coal recovery as mining progresses along the existing highwall until reaching its end near Short Creek Road in the NW 1/4 of the SE 1/4 of Section 34, Township 16 South, Range 5 West.

The maximum depth into the wall that the miner is capable of penetrating varies and is dependent on the hardness of the material, the consistency of the coal bed, whether flat or rolling, and other site conditions. The highwall miner that is proposed to be used has the capability to mine into the wall a maximum of 1,600 feet. The highwall miner head will take a cut 9.5 feet wide by variable height. A web pillar will remain between each opening. Barrier pillars will be left at the ends of a series of highwall miner holes. See Attachment III-A-1(a), Highwall Mining Layout for dimensions of layout for both the Pratt and American 1, 2, and 3 Coal Seams.

Highwall mining will be performed in such a manner that provides adequate support pillars between each hole. Spacing of the recovery holes will vary depending on the nature of the overburden, depth of the overburden and coal seam thickness and is specifically shown later in this application. Highwall mining will be performed on the Pratt and American 1, 2, and 3 Coal Seams. The Pratt Seam lies above the American 1 Seam an average of approximately 60 feet within the area proposed for highwall The American 1, 2, and 3 Seams will be highwall mined first with backfill of the highwall occurring behind the highwall mining operation up to the level of the Pratt Seam. Timing of the backfill of the highwall to the Pratt Seam level will follow, as closely as practicable, the American Seams highwall mining, but will remain far enough behind the active mining operation to provide for safe and efficient operations. After mining of the American 1, 2, and 3 Seams, highwall mining operations will move to the Pratt Seam and will follow the same process as the initial

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

mining of the American Seams, with final reclamation of the Pratt Seam highwall following the mining operations as closely as safe and efficient operation procedures will allow.

Highwall miner holes shall be sealed with an impervious, noncombustible material, as contemporaneously as practicable with the highwall miner operation, as approved by the Regulatory Authority, if the holes are not discharging water containing acid or toxic-forming material. In order to minimize disturbances of surface and ground water, each miner hole shall be sealed within 72 hours with an impervious, non-combustible material if the holes are discharging water containing acid or toxic-forming If sealing is not possible within 72 hours, the discharge shall be treated commencing within 72 hours after completion, to assure that water quality standards for water leaving the site are maintained and are not compromised until the holes are sealed. Each highwall miner entry will be sealed by backfilling with impervious, non-combustible clay material to a minimum of four feet above the top of the entry and compacted to provide an impervious seal prior to the backfilling and reclamation of the final highwall. See Attachment III-A-6.

The highwall mining system to be used, CAT HW300, at the Lindbergh No. 2 Mine will recover 65.57% of the remaining Pratt Seam coal to a maximum depth of 1,600 feet from the final highwall and will recover 59.94% of the remaining American Seams 1, 2, and 3 coal to a maximum depth of 1,600 from the final highwall. Extraction height for the Pratt Seam will be 2.5 feet and will be 3.0 feet for the American Seams 1, 2, and 3.

Highwall mining will be done in a manner that provides adequate support pillars to prevent surface subsidence. Dr. Chris Mark of the US Bureau of Mines (now NIOSH) initially developed the ARMPS-HWM program to predict the possibility of subsidence due to longwall mining/highwall mining. Dr. Zach Agioutantis later developed it into a windows application. Attached are ARMPS-HWM output sheets showing minimum safety factors for each seam.

The following table shows the recommended and actual safety factors for this application as determined by the ARMPS-HWM. As shown, the highwall mining system panel design described earlier in this section is adequate to prevent subsidence.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

	Recommended	Actual Pratt	Actual American
Overall	2.0	2.19	2.23
Web Pillars Only	1.3	1.34	1.32
Barrier Pillars Only	1.5	1.50	1.53

Drainage, if water is encountered, will be controlled from each recovery hole by allowing each hole to drain into the open pit and be pumped, if necessary, to an approved sediment basin. If required to meet effluent limits, drainage, if occurring, will be treated chemically in accordance with the surface water treatment plan of this permit.

Highwall miner holes not discharging water containing acid or toxic-forming material shall be sealed with an impervious, noncombustible material, as soon as practicable without conflicting with the highwall miner operation, as approved by the Regulatory Authority. In order to minimize disturbances of surface and ground water, if the holes are discharging water containing acid or toxic-forming material, each miner hole, so discharging, shall be sealed within 72 hours with an impervious, non-combustible If sealing of a discharging hole is not possible material. within 72 hours, the discharge shall be treated commencing within 72 hours after completion of the hole, to assure that water quality standards for water leaving the site are maintained and are not compromised until the holes are sealed. Each highwall miner entry will be sealed by backfilling with impervious, noncombustible clay material to a minimum of four feet above the top of the entry and compacted to provide an impervious seal. See Attachment III-A-6.

Upon completion of the highwall mining operations, the final pit will be regraded in accordance with the approved Reclamation Plan.

Highwall mining progress maps showing the highwall mining progress through December 31 of each calendar year shall be submitted to the Alabama Surface Mining Commission by January 31 of the following calendar year. Annual progress maps shall be required for each year that highwall mining is in operation.

See the following ARMPSHWM Module output sheets for the Pratt and American Coal Seams and the attached ARMPSHWM Suggested Minimum Stability Factors.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

ARMPSHWM	module	build:	1.	3.	.02

Project	File:	Lindbergh	#2	Mine.	Pratt	Seam	Highwall	Minina
	1 1 1 0 1	HITIODCI 911	π 4	111110	LIUCC	DCam	III GIIW GI I	11111119

Input Units: (ft) (psi)

Centennial Natural Resources, LLC, Lindbergh #2 Mine, P-3765, R-23, Pratt Seam Highwall Mining

Extraction Thickness
Depth of Cover
Hole Width9.5 (ft)
Web Thickness4 (ft)
Barrier Pillar Width14 (ft)

Number of Holes......10

In Situ Coal Strength900	(psi)
Unit Weight of Overburden162	(pcf)
Abutment Angle of Gob21	(deg)

#### [ARMPS-HWM STABILITY FACTORS]

Overall.		 	 	 .2.19
Webs ONI	Y	 	 	 .1.34
Barrier	Pillar	 	 	 .1.50

Panel width (excluding barriers)	131.00	(ft)
Barrier pillar width-to-height ratio	5.60	
Web thickness-to-height ratio	1.60	
Extraction ratio	65.52 %	5

#### [PILLAR PARAMETERS]

PILLAR	ENTRY	MINIMUM
	CENTER	DIMENSION
	(ft)	(ft)
Barrier	23.50	14.00
Web	13.50	4.00
PILLAR	AREA	STRENGTH
	(ft)*(ft)	(psi)
Barrier	1.40E+07	3.30E+03
Web	4.00E+06	1.35E+03

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### ARMPSHWM module build: 1.3.02

## Project File: Lindbergh #2 Mine, American Seams 1, 2, and 3 Highwall Mining

Input Units: (ft) (psi)

Centennial Natural Resources, LLC, Lindbergh #2 Mine, P-3765, R-23, American Seams 1, 2, and 3 Highwall Mining

Extraction Thickness	.3 (ft)
Depth of Cover	.323 (ft)
Hole Width	.9.5 (ft)
Web Thickness	.5 (ft)
Barrier Pillar Width	.18.5 (ft)
Number of Holes	.10

#### [DEFAULT PARAMETERS]

In Situ Coal Strength	900	(psi)
Unit Weight of Overburden	162	(pcf)
Abutment Angle of Gob	21	(deq)

#### [ARMPS-HWM STABILITY FACTORS]

Overall	33
Webs ONLY1.3	32
Barrier Pillar1.5	3

Panel width (excluding barriers)	.140.00	(ft)
Barrier pillar width-to-height ratio	.6.17	
Web thickness-to-height ratio	.1.67	
Extraction ratio	.59.94	ò

#### [PILLAR PARAMETERS]

PILLAR	ENTRY	MINIMUM
	CENTER	DIMENSION
	(ft)	(ft)
Barrier	28.00	18.50
Web	14.50	5.00
PILLAR	AREA	STRENGTH
	(ft)*(ft)	(psi)
Barrier	1.85E+07	3.57E+03
Web	5.00E+06	1.39E+03

Applicant: <u>Centennial Natural Resources LLC</u> Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

### **Table 1: Stability Factors**

ARMPS-HWM Suggested Minimum Stability Factors		
Overall SF	Overall SF Conditions	
2.0	Applicable to all conditions	
Web pillar SF	Conditions	
1.6	When the panel width (excluding the barrier) exceeds approximately 200 ft (60 m)	
1.3	When the panel width (excluding the barrier) is less than approximately 200 ft (60 m)	
Barrier pillar SF	Conditions	
2.0	When the barrier's width-to-height ratio < 4.0	
1.5	When the barrier's width-to-height ratio >= 4.0	

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### H. <u>Subsidence Control Plan</u> (784.20)

1. Include a survey which shows what structures or renewable resource lands exist within the proposed permit and adjacent area and whether subsidence, if it occurred, could cause material damage or diminution of reasonably foreseeable use of such structures or renewable resource lands. If it is determined that no material damage will occur to surface structures or renewable resource lands from subsidence, the application shall include supporting evidence of such a finding.

All power lines, pipelines, buildings, roads and other facilities are shown on the permit map and the presubsidence map. No subsidence is anticipated due to the spacing of the holes and the barrier pillars to be left. There are no groundwater users within one-half mile of the proposed mining area. See Permit Map.

A significant portion of the permit area is underlain by the Jim Walter Resources Bessie Mine, as shown on the permit map, operations map and pre-subsidence map for this permit, which targeted the Mary Lee Coal Seam. No adverse effects from the existence of the Bessie Mine have occurred during the life of mining on P-3765 and none are anticipated due to the introduction of highwall mining by this permit revision.

Two structures, previously occupied dwellings, are located in the NE 1/4 of NW 1/4 of Section 2, Township 17 South, Range 5 West. These previously occupied dwellings, along with the property they occupy, are owned by North American Coal Royalty Company, as shown in Part I of this application, have been vacated, and are no longer occupied dwellings. No other buildings or structures exist within the area shown by the Permit Map.

There are no domestic wells in use within one-half mile of the proposed mine area or the 30 degree angle of draw projected therefrom. No subsidence is anticipated due to the spacing of the holes and the barrier pillars to be left.

A producing methane gas well exists well outside the 30 angle of draw on the south end of the area to be mined and is shown on the mapping. The well name is CLC 02-06-242, permit number 14635-C and its operator as listed on the Alabama Oil and Gas Board is ARP Production Company, LLC, 1000 Commerce Drive, 4<sup>th</sup> Floor, Pittsburgh, PA 15275.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

Elbo Porter Road and Forrester Road, previously owned and maintained by Jefferson County, have been closed and their rights-of-way vacated. See Attachment I.-D.-6.

The land overlying the area to be highwall mined is undeveloped/no current use. Trees are the only renewable resource within the area to be highwall mined. Since tree harvesting operations typically operate on irregular terrain, subsidence would have to be very substantial in order to impact tree harvesting operations. Subsidence of that magnitude is not likely since the total height of the coal recovery holes is 5.5'. In the event renewable resources are impacted, the subsidence will be repaired as necessary.

Design of the highwall miner hole layout was done using the NIOSH ARMPSHWM program. In the highly unlikely event that subsidence occurs and causes material damage to any renewable resources lands Centennial Natural Resources, LLC will repair the materially damaged land to its condition existing before subsidence, or the owner will be compensated for any damage.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

(b) Unplanned Subsidence. See Attachment III.-A.-1.
Operations Map for the area anticipated to be highwall mined.

- (1) Using maps, plans, and cross sections, as needed, locate the areas where coal extraction is to take place and where subsidence, if incurred, cannot be considered planned subsidence. Clearly show on a map the relationship of parts (i-v) below to critical surface features, renewable resource lands, and structures. See Operations Plan Map Attachment III.-A.-1.
  - (i) Provide a detailed mine plan map. Describe the methods of mining used, such as room and pillar, checker board, blind room or other methods.
  - (ii) Locate extraction panels, give geometric sizes, dimensions and orientation, and include details of length, width and height of panels. Give percent of coal left as support in ratio to percent of coal removed within the extraction panel. Provide information on crosscut and room dimensions, and both driven on what centers. Include similar information concerning any secondary recovery that is planned.
  - (iii) Provide details locating all permanent coal blocks and barrier pillars outside the actual extraction panels. Give geometric shapes, dimensions, and orientation of these blocks and barrier pillars.
    - (iv) Give anticipated date (month/year) in which mining will be conducted in each area and/or panel.
    - (v) Characterize variations in claystone layers immediately below the extracted coal seam(s). Include data on varying claystone thickness throughout the area covered by the subsidence control plan. Provide assurances that measures have been adopted concerning the maximization of mine stability as it relates to claystone flood conditions.
- (2) Provide a detailed description of measures to be taken to prevent unplanned subsidence from causing material damage or lessening the value or reasonable foreseeable use of the surface. Describe how these measures are to be applied. Include the following information.
  - (i) Locate area(s) in which coal removal is not planned, including its relationship to overlying area(s) to be protected by leaving coal in place.

Applicant: <u>Centennial Natural Resources LLC</u> Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

- (ii) Locate area(s) to be backfilled or backstowed.
  - (iii) Describe measures to be taken on the surface to prevent material damage or diminution of the value or reasonable foreseeable use of the surface including, but not limited to:
- (A) Reinforcement of sensitive structures or features;
- (B) Installation of footers or other techniques designed to reduce damage caused by movement;
- (C) Change of location of pipelines, utility lines or other features;
- (D) Relocation of moveable improvements to sites outside the potential angle-of-draw;
- (E) Monitoring to determine the commencement and degree of subsidence so that appropriate measures can be taken to prevent or reduce damage; and
- (F) Describe any other prevention measures to be taken.
- (3) Provide a detailed description of measures that are to be taken to mitigate the effect of any material damage or diminution of value or foreseeable use of lands which may occur as a result of unplanned subsidence. Describe how these measures are to be promptly applied in accordance with 817.124. Measures include, but are not limited to, one or more of the following:
  - (i) Restoration or rehabilitation of damaged structures (including surface and underground agricultural drainage systems), features and lands after subsidence to a condition capable of supporting and suitable for foreseeable use including restoration of approximate land surface contours to premining conditions in order to assure proper surface drainage.
  - (ii) Replacement of structures, including surface and underground agricultural drainage systems destroyed or damaged by subsidence.
  - (iii) Purchase of structures prior to mining or purchase of damaged structures at pre-subsidence value.
    - (iv) Purchase of non-cancellable insurance policies, as described in 817.124(c), payable to the surface owner in the full amount of the possible material damage or other comparable measures.
  - (v) Describe other mitigation measures to be taken.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

(4) Provide a detailed description of measures to be taken to determine the degree of material damage or diminution of value or foreseeable use of the surface, including, but not limited to such measures as:

- (i) Conducting of pre-subsidence surveys of all structures and surface features which might be materially damaged by subsidence.
- (ii) Monitoring to measure deformation near specified structures or features or other appropriate locations.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-<u>3765 Revision R-23</u>

#### PART IV ADDENDUM TO RECLAMATION PLAN

1) The effect of this revision is to add highwall mining to the existing Permit P-3765. No new acreage is being added to the Permit through this revision. The proposed post mining land use of the revision area is the same as the historic land use of the revision area prior to this revision as approved in the original P-3765 Permit Application and its subsequent revisions.

See the original permit application and subsequent revision applications for specific land uses, both historic and proposed post mining.

- 2) No prime farmland exists within the permit area.
- 3) Completeness of contouring, backfilling, and grading shall follow the same requirements as the previously approved Reclamation Schedule. All grading and contouring shall follow the approximate original contours.
- 4) Topsoil handling and revegetation will follow the originally approved Reclamation Plan in Permit P-3765.
- 5) Husbandry practices and sampling to determine success of revegetation shall be in accordance with the originally approved Permit P-3765 and subsequent revisions.

Mine Name: <u>Lindbergh Mine No. 2</u> Permit Number: P-3765 Revision R-23

#### Part V - Bonding

#### A. <u>Site Conditions</u> (805.11)

- 1. Briefly describe the site conditions within the increment which you are currently proposing to mine by answering the following:
  - (a) Average pre-mining slope 27%
  - (b) Percent sandstone 30%
  - (c) Final highwall slope (average) (if applicable) 40%

  - (e) Average pH of topsoil or topsoil substitute <u>6.0</u>

Note: If pH range over the increment area is greater than one pH unit (units 1 through 14), give approximate number of acres which fall within each unit.

- (f) Overburden acid-base account (expressed as tons of calcium carbonate per 1,000 tons material) N/A (only if total sulfur exceeds 0.5%)
- (g) Acres abandoned land located in proposed permit area  $\underline{24}4$  Acres
- B. Estimate of Reclamation Cost (780.18)

Give a detailed estimate of your cost of reclamation for the increment you are currently proposing to mine. Give individual cost estimates for grading, highwall elimination, topsoil (or topsoil substitute) replacement, revegetation and any other cost which may be applicable (prime farmland, hydrologic factors, etc.).

The reclamation bond amount will be set by the Alabama Surface Mining Commission.

Applicant: Centennial Natural Resources LLC Mine Name: Lindbergh Mine No. 2 Permit Number: P-3765 Revision R-23

#### Part VI - Verification of Permit Application

I, the undersigned operator and holder of an ASMC license, do hereby submit this as my application for a permit to engage in surface coal mining operations and certify that the information in the application is true and correct to the best of my information and belief. This application is submitted in conformance with the rules and regulations of the Commission and it is agreed that any operations pursuant to the permit will be conducted in accordance with those rules and regulations. I further certify that I will keep the Commission advised of any change of facts as may pertain to the license information or this permit application.

<u>Centennial Natural Resources LLC</u> <u>Licensee:</u> License No. L-836

By: Kalt S. Ro

Robert S. Roberts, Engineering Manager

STATE OF ALABAMA )

WALKER COUNTY )

Before me, the undersigned authority, personally appeared <u>Robert S. Roberts</u>, who being duly sworn upon oath, deposed and said, that he has read the foregoing application, that he is the responsible official of the applicant who executed the application, that the facts and matters contained therein are true and correct to the best of his information and belief, and that he executed the same for the purposes therein expressed.

Sworn to and subscribed before me, this 16th day of

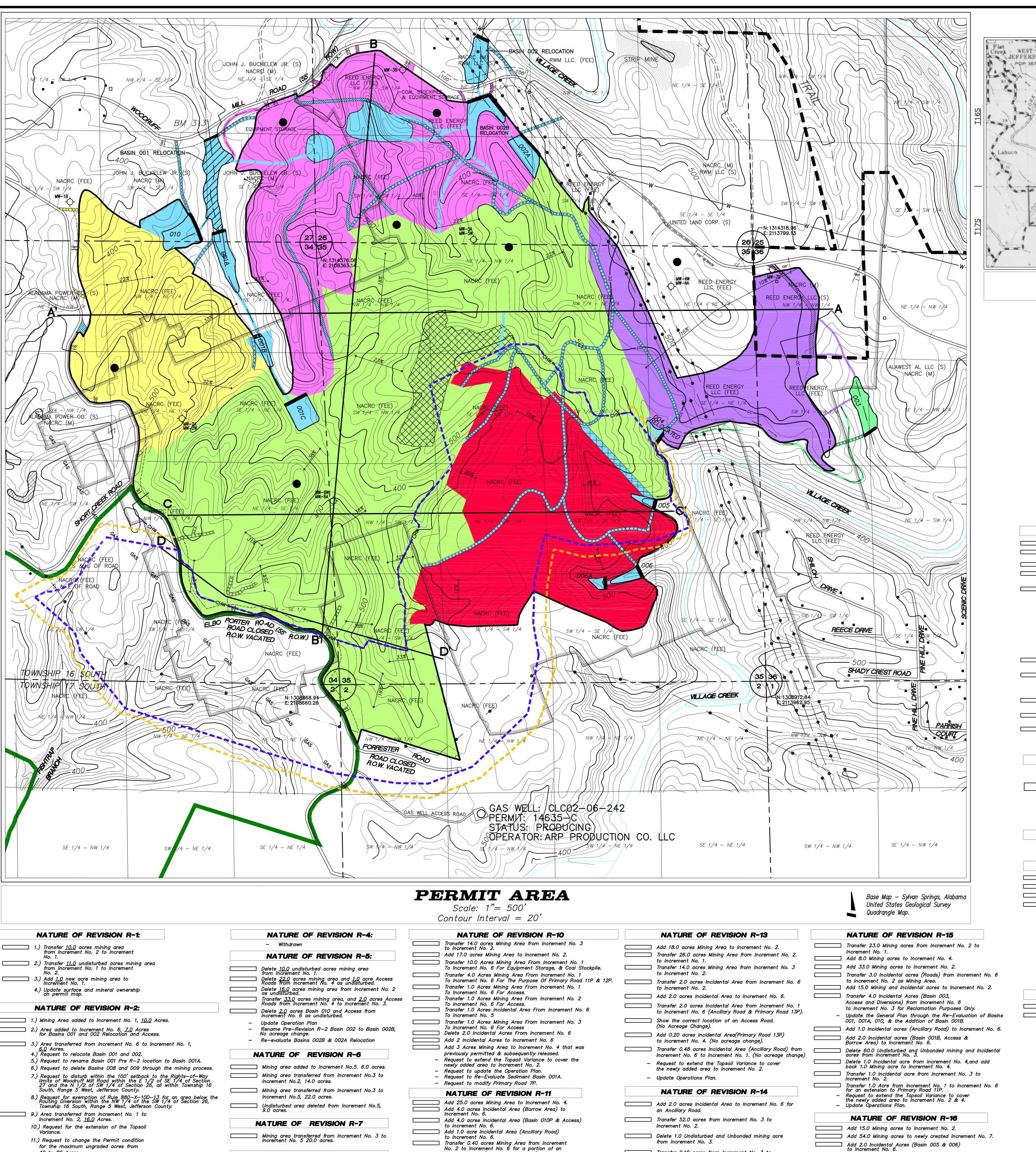
2018.

Notary Public

My Commission Expires : 9/4/2019

Commission Expires





No. 2 to Increment No. 6 for a portion of an

No. 5 to Increment No. 6 for a portion of an

- Request to extend the Topsoil Variance to cover the

Ancillary Road. (No Acreage Change)

newly added area to Increment No. 2.

NATURE OF REVISION R-12

☐ Add 11.0 acres Mining Area to Increment No. 2.

Transfer 14.0 acres Mining Area from Increment No. 3

- Request to extend the Topsoil Variance to cover

the newly added area to increment No. 2.

Ancillary Road.

Update Drainage Control Plan.

to Increment No. 2.

Update Operations Plan.

\_\_\_\_\_ Transfer 1.0 acre Mining Area from Increment

NATURE OF REVISION R-8

**NATURE OF REVISION R-9** 

\_\_\_\_\_ Mining area transferred from Increment No. 5 to

Increment No. 6 (ancillary road) 1.0 acre.

Mining area transferred from Increment No. 3 to Increment No. 2 7.0 acres.

Mining area added to Increment No. 2 4.0 acres.

Incidental area (ancillary road) added to Increment No. 6 5.0 acres.

Mining area transferred from Increment No. 3 to Increment No. 2 11.0 acres.

Transfer 0.10 acres from Increment No. 3 to

Transfer 4.0 acres from Increment No. 5 to

road (No acreage change).

Increment No. 2.

to Industrial.

Increment No. 6 for an extension of an ancillary

- Request to change the Post Mining Landuse on a portion

of Increment No. 5 from Undevelopment/No Current Use

Alignment within Increment No. 3 and Increment No. 4.

Update Operations Plan with regard to the Cut

Delete 0.45 Incidental Acres from Increment No. 2 and add back 0.45 Mining acres to to Increment No. 2.

- Update the Drainage Control Plan through the Addition

Request to Update the Topsoil Variance to Cover the

- Submit Detailed Design Plans For Basin 005 & 006.

Request to Change the Post Mining Land Use of the Area Assessed For Basins 004, 005, and 006 From Undeveloped/ No Current Use To Permanent Water Impoundment, Fish And Wildlife Habitat.

Add 1.0 Incidental acre to Increment No. 6.

of Sediment Basins 005 & 006.

Update Hydrologic Monitoring Plan.

Show Correct Location of Basin 004.

Update the Operations Plan.

Newly added Area.

for the maximum ungraded acres from

**NATURE OF REVISION R-3:** 

4.) Update surface ownership within the NW 1/4 of NW 1/4 of Section 36, Township 16 South, Range 5 West, Jefferson County.

5.) Request to condition the Reclamation Plan to allow for a Maximum Ungraded Area of <u>20.0</u> Acres for Increment No. 5.

40 to 80 Acres.

1.) Transfer <u>14.0</u> acres mining area from Increment No. 2 to Increment

3.) Transfer <u>70.0</u> acres mining area from Increment No. 5 to Increment

2.) Transfer 14.0 undisturbed acres mining area from Increment No. 1 to Increment

### **VICINITY MAP** Scale: 1"= 1 Mile

Permit Boundary

**LEGEND** 

——— Increment Boundary P-3930 WB Mining, LLC / Fishtrap Mine #2 *─600* — Surface Contour — Drainage Divide OO1 Sediment Basin

Perennial Stream Intermittent Stream Land Slope Measurement ---- Property Line other than Forty Line → → Diversion Ditch/Berm

Indicates Surface Ownership

= = 30° Angle of Draw from Highwall Mining

Occupied Dwelling Unoccupied Dwelling (Barn, Shed, etc..) Primary Road

Ancillary Road

———— County Road (Paved unless otherwise designated) ==== Road (Private unless otherwise shown) 理理理理理 Private Road Indicates Mineral Ownership

Indicates Both Surface and Mineral Ownership N:1389932.16 Alabama West Zone NAD83 State Plane Coordinates Area Under Consideration for Highwall Mining

### **NATURE OF REVISION R-17**

\_\_\_\_ Add 107 Mining Acres to Increment No. 7 Transfer 11 Mining Acres from Increment No. 7 to Increment Add 1 Incidental Acre to Increment No. 2 for Access Rd. Transfer 4 Mining Acres from Increment No. 7, to Increment No. 6 for Access Roads.

\_\_\_\_ Transfer 1 Mining Acres from Increment No. 7, to Increment No. 6 for Basin 006A and Drainage Course. Update the General Plan through the Addition of Basins 001CP and 006AP, Re—evaluation of Basins 001E, 001AE, and 010E, modification of the detailed design plans of Basins 005P and

006P, and the modification of Basin 001BE. Request to Update the Operations Plan. - Request to Update the Topsoil Variance to Cover the Newly added Area.

 Update Surface Ownership. Change Primary Roads 009P 0+00 to 2+81 and 010P 0+00 to 2+03 to Ancillary Roads.

Correct map symbol and road classification from Primary Roads to Ancillary Roads located in the SE/SW of Section 27, the NW/SE and SE/SE of Section 34, and SW/SW of Section 35, Township 16 South, Range 5 West Jefferson County, Alabama. Transfer 4 Mining Acres from Increment No. 2 to Increment

☐ Transfer 0 Acres for Basin 001CP from Increment No. 1 to Increment No. 6. (No Acreage Change) Transfer 3 Acres for Basin 001CP from Increment No. 2 to Increment No. 6. Alignment.

## NATURE OF REVISION R-18

- Update Operations Plan with Regard to Cut Sequence and Modify the Boundary of the Area Previously Identified as

"Area Where Mining has been Completed" to be Consistent with the Revised Operation Plan within this Revision Application. - Request to Rescind Permit Condition R-17-4 which requires Basin 001C to be Constructed and Certified to the Regulatory Authority no Later than 90 Days from the Issuance of Revision

NATURE OF REVISION R-19 - Update the General Plan with Regard to the Construction Timetable of Basin 001C.

### **NATURE OF REVISION R-20** Add 76 Mining Acres to Increment No. 2.

Add 10 Mining Acres to Increment No. 4. Add O(Less than 1 Acre) Mining Acres to Increment No. 2. \_\_\_\_\_ Add 0 (Less than 1 Acre) Incidental Acres to Increment No. 6 for Primary Road 14P. - Update the General Plan through the Re-evaluation of Basins 001E, 001AE, 001BE, 010E and submit Modification Detailed Design Plans of Basin 001CP, and update the General Plan with regard to the construction timetable of Basin 001CP.

 Update the Operations Plan. - Extend the Topsoil Variance to include the area added by

- Update the Reclamation Plan to add Cross-section D-D'. - Request to Remove the Permit Condition for the Maximum Ungraded Acres for Increment No. 2.

- Submit the Detailed Design Plans for Primary Road 14P.

### NATURE OF REVISION R-21 Add O( Less than 1 Acre) Mining Acres to Increment No. 2.

Add 4 Mining Acres to Increment No. 4. - Extend the Topsoil Variance to include the area added by Acres Added in this Revision is for Reclamation and Dragline Walkway Only.

### **NOTES**

– All Buildings Within 1000' of Permit Area are shown. - Surface and Mineral Ownership By Forties Unless Otherwise

- No Topsoil Shown Due to Topsoil Variance Request. – No Municipality has Police Jurisdiction Within or Contiguous To the Permit Area. - Police Jurisdiction Within and Contiguous to the Permit Area is Provided by Jefferson County and the City of Adamsville.

· Coal Stockpile Locations are subject to change. - Permit Boundary along Elbo—Portal Road is 20' from edge of Pavement Between Forrester Road and Short Creek Road as Approved by Jefferson County Commission, January 9, 2014.



Previously Surface Mined Cemetery Underground Limits of Jim Walter Resources,

Inc. Bessie Mine Existing Impoundment Power Line

Monitoring Well

—— GAS —— Gas Line -x-x-x- Silt Fencing

Coal Stockpile Adamsville City Limits

Current Highwall Location Determined by Survey, February, 2016 **D'** Reclamation Cross—Section

Area Where Mining has been Completed

## **NATURE OF REVISION R-22**

Transfer 11 Acres Mine Area from Increment No. 7 to Increment No. 2. Transfer 6 Acres for Basin 002BE and Drainage Courses From Increment No. 1 to Increment No. 6. ☐ Debond 138 Acres of Undisturbed Area Remaining in • Update Property Ownership.

### **NATURE OF REVISION R-23**

— Revise the Operations Plan to include highwall mining of the final highwall after surface mining of all economically feasible recoverable coal.

# POST REVISION R-23 BOND LEGEND

Area Permitted Under Increment No. 1, 142 Acres.
140 Acres Mining Area, Coal Stockpile, and Diversions. 1 Acre Drainage Courses 1 Acre Access Roads

Area Permitted Under Increment No. 2, 437 Acres. 435 Acres Mining Area and Coal Stockpile. 2 Acre Access Roads Area Permitted Under Increment No. 3, 4 Acres

(Phase III Bond Release.) \_\_\_\_\_ Area Permitted Under Increment No. 4, 102 Acres. 00 Acres Mining Area, Coal Stockpile, and Diversions

Area Permitted Under Increment No. 5, 88 Acres (Phase III Bond Release.)

Area Permitted Under Increment No. 6, 68 Acres. 24 Acres Access Roads 6 Acres Off—Site Diversions & Drainage Courses 24 Acres Basins 001, 001A, 001B, 001C, 002, 002A, 002BE, 004, 005, 006, 006A and 010. 10 Acres Equipment Storage & Coal Stockpile

4 Borrow Area Area Permitted Under Increment No. 7, 138 Acres. 138 Acres Mining Area, Coal Stockpiles, & Diversions

Total Permitted Area......979 Acres.

|-|0||0||4||0||0

Date

I, R. Evan Parrish, a Registered Professional Land Surveyor, hereby certify the foregoing to be a true and correct map to the best of my knowledge, information, and belief.

R. Evan Parrish, PLS AL Registration No. 12936

No. 12936 PROFESSIONAL